

# Progress Learning LLC

Supplemental English Mathematics, Algebra II

Progress Learning Algebra II (TEKS)

MATERIAL TYPE	ISBN	FORMAT	ADAPTIVE/STATIC
<b>Supplemental</b>	<b>9781953417060</b>	<b>Digital</b>	<b>Static</b>

## Rating Overview

TEKS SCORE	TEKS BREAKOUTS ATTEMPTED	ERROR CORRECTIONS (IMRA Reviewers)	SUITABILITY NONCOMPLIANCE	SUITABILITY EXCELLENCE	PUBLIC FEEDBACK (COUNT)
100%	135	0	Flags Addressed	Not Applicable	0

## Quality Rubric Section

RUBRIC SECTION	RAW SCORE	PERCENTAGE
1. <a href="#">Intentional Instructional Design</a>	23 out of 23	100%
2. <a href="#">Progress Monitoring</a>	23 out of 24	96%
3. <a href="#">Supports for All Learners</a>	33 out of 39	85%
4. <a href="#">Depth and Coherence of Key Concepts</a>	16 out of 16	100%
5. <a href="#">Balance of Conceptual and Procedural Understanding</a>	33 out of 38	87%
6. <a href="#">Productive Struggle</a>	21 out of 21	100%

## Breakdown by Suitability Noncompliance and Excellence Categories

SUITABILITY NONCOMPLIANCE FLAGS BY CATEGORY	IMRA REVIEWERS	PUBLIC	Flags NOT Addressed by November Vote
1. Prohibition on Common Core	0	0	0
2. Alignment with Public Education's Constitutional Goal	4	0	0
3. Parental Rights and Responsibilities	0	0	0
4. Prohibition on Forced Political Activity	0	0	0
5. Protecting Children's Innocence	4	0	0
6. Promoting Sexual Risk Avoidance	0	0	0
7. Compliance with the Children's Internet Protection Act (CIPA)	0	0	0

SUITABILITY EXCELLENCE FLAGS BY CATEGORY	IMRA REVIEWERS
Category 2: Alignment with Public Education's Constitutional Goal	0
Category 6: Promoting Sexual Risk Avoidance	0

# IMRA Quality Report

## 1. Intentional Instructional Design

Materials support educators in effective implementation through intentional course and lesson-level design.

### 1.1 Course-Level Design

GUIDANCE	SCORE SUMMARY	RAW SCORE
1.1a	All criteria for guidance met.	5/5
1.1b	All criteria for guidance met.	3/3
1.1c	All criteria for guidance met.	2/2
1.1d	All criteria for guidance met.	2/2
1.1e	All criteria for guidance met.	2/2
—	TOTAL	14/14

**1.1a – Materials include an alignment guide outlining the TEKS, ELPS, and concepts covered, with a rationale for learning paths across grade levels (vertical alignment) and within the same grade level (horizontal alignment) as designed in the materials.**

The materials include an alignment guide that outlines the concepts covered within the grade level or course and demonstrates how the concepts connect to previous and subsequent grade levels or courses. Each lesson plan also contains a section labeled "Vertical Alignment." The "Scope and Sequence" document provides a rationale for learning paths within the same grade level lessons, and the Texas Essential Knowledge and Skills (TEKS) are organized by lessons.

Materials include rationale for learning paths within the alignment guide for the same grade level only. The scope and sequence includes rationale by lesson. Lesson rationales include horizontal alignment statements such as, "This lesson lays important groundwork for upcoming work with rational expressions and equations," and "The lesson builds on Lesson 3, which . . ." There are also rationale statements for vertical alignment. For example, "Students build on their Algebra 1 foundation to formulate and solve systems of three linear equations. They extend their understanding of solving 2x2 systems using substitution to solve 3x systems."

**1.1b – Materials include an implementation guide with usage recommendations and strategies for effective educator use, such as just-in-time supports, advanced learning, or as a course.**

In the "Implementation Guide," there is a section labeled "Suggested Activities." For example, in the "Implementation Guide," teachers will find the breakdown of how a lesson will be taught, time limit suggestions for each part of the lesson, a structure section that gives teachers options on how they can

teach the lesson, and more. An approximation of the total lesson plan time is given in the "Suggested Activities" header and is also included in the "TEKS alignment and pacing" guide. Additionally, the approximated time for each E of the 5E lesson plan is given at the start of each section.

In the "Implementation Guide," there is a section labeled "Vocabulary and Vertical Alignment." The vocabulary lists comprise academic and mathematical language directly found in the content standards covered in each lesson plan, and vocabulary that was previously introduced to students in earlier grades that vertically align to the grade-level standards being taught. Additionally, the list also includes vocabulary that may not be explicitly stated in the content standards but is used on items aligned to the lesson plan standards that have been assessed on the State of Texas Assessment of Academic Readiness (STAAR).

### **1.1c – Materials include a TEKS correlation guide with recommended skill entry points based on diagnostic assessment results.**

The materials include a "Scope and Sequence" guide, named "Algebra I Content TEKS Coverage by Lesson," that has the TEKS and the lessons listed.

### **1.1d – Materials include protocols with corresponding guidance for unit and lesson internalization.**

The materials include processes for educators to thoroughly understand and prepare to teach a concept. Viewing a sample lesson plan, Lesson 6: "Interpreting Data with Linear Models," opens a document of the lesson plan, and the file contains the following sections: "Objectives," "Standards," "Vocabulary," "Lesson Resources," "Suggested Activities," a "Teacher Guide" with activities, answer key, assessments, and teacher rationales that detail the TEKS standards for each question.

The materials include processes for educators to thoroughly understand and prepare to teach a concept, which includes understanding the sequence of learning in the context of the learning progression found on the vertical alignment section of a lesson plan.

The "Explore Teacher Guide," located within the Instructional Resources, for each of the 15 topics includes detailed teacher guidance outlining student objectives, materials needed, guiding questions, common misconceptions, and implementation suggestions for each component of the 5E model. The guide provides step-by-step guidance on implementing the material as designed, which includes "important cues for when to pass out specified materials, which cooperative learning strategies to use, and identifies key moments in the lesson for when to listen and check for student understanding."

The "Algebra II Scope & Sequence," located within the Instructional Resources, provides a rationale for all 15 lessons. The rationale describes what concepts are covered in the lesson and how they relate to the course as a whole to help teachers internalize the mathematical knowledge students will gain from the lesson.

## **1.1e – Materials include resources and guidance for instructional leaders to support educators with implementing the materials as designed.**

Materials include some resources for instructional leaders to support educators with implementing the materials as designed. The "Admin Quick Start Guide" provides a two-page guide for getting started, including a "Tips for a Successful Bulk Upload" paragraph, and a section for "Training Options."

The materials have an "Implementation Guide" that explains to the user where to locate information (ELPS, the TEKS, vertical and horizontal alignment) and what to see within the lesson resources. The materials also give suggested activities and activities for intervention. For example, in the "Implementation Guide," under the section labeled "Suggested Activities," it states that following the lesson, suggested activities are provided for both intervention and enrichment. The teacher may organize students into small groups based on their needs to complete the appropriate set of activities. There are videos that the teacher can choose from—that may come from below grade-level or on grade-level Progress Learning digital products—while the enrichment videos are often drawn from above grade-level resources. If the teacher has access to these digital products, they can locate and assign the appropriate videos to students. This approach allows the teacher to gather and analyze student data as they engage with the content.

The Help Center provides resources, such as an "Administrator Quick Start Guide," to help instructional leaders facilitate effective use of the program. The quick start guide includes a general overview of the progress reports using a Dot Rank system at the school, teacher, and student levels. The "color-coded dot rank system indicates areas of strength and weakness for your school," which can be used to monitor and guide implementation.

The "Training and Professional Development" includes on-demand training videos for administrators on topics such as "District Admin 101" and "Data Dive."

## 1.2 Lesson-Level Design

GUIDANCE	SCORE SUMMARY	RAW SCORE
1.2a	All criteria for guidance met.	7/7
1.2b	This guidance is not applicable to the program.	N/A
1.2c	All criteria for guidance met.	2/2
—	TOTAL	9/9

### **1.2a – If designed to be static, materials include detailed lesson plans with learning objectives, teacher and student materials, lesson components with suggested timeframes, and assessment resources aligned with the TEKS and ELPS.**

Materials include lesson plans with objectives that are aligned and specific to the TEKS. The ELPS are included in the lesson plan document, but the objectives are not directly aligned to them at any point. For example, in the specific lesson plan, under "Standards," there are three sections: "Algebra II Content," "Process," and "Language." This is the only place the ELPS show up.

Materials include lesson plans with objectives that are aligned to the TEKS. The lesson plan document also lists the ELPS under the 'Language' standards section; however, the ELPS are not clearly integrated into the lesson objectives or instructional components.

Materials have suggested activities that include an approximate total time in minutes, and it is broken down further within each component of the 5E model for each specific lesson. For example, in Lesson 6 the suggested activities are approximately 95 minutes total; within that, the "Engage" activity is estimated at 5 minutes, the Explore activity at 25, etc. The lesson materials include teacher and student versions.

Materials include assessment resources that are provided within the lesson plan documents that are aligned to the TEKS, which are clearly identified in the "Learning Snapshot Rationales" section of the lesson plan document. This section also includes rationale for each answer choice (correct and incorrect). The ELPS are not clearly identified within the assessment resources provided.

### **1.2b – If designed to be adaptive, materials include detailed lesson overviews with learning objectives, lesson components with suggested timeframes, and assessment resources aligned with the TEKS and ELPS.**

This guidance is not applicable because the program is not designed to be adaptive.

### **1.2c – Materials contain support for families in Spanish and English for each unit, with suggestions on supporting the progress of their student(s).**

There is an "Algebra II Support for Families" guide where families are able to access the "Support for Families" guide, and have the ability to look at the slides that cover that topic specifically. They find the

lesson that the student is working on and scan the QR code to be able to gain access to those slides. This guide also gives suggestions on how the family can help their student at home.

For example, in the "Algebra II Support for Families" guide, under Lesson 2, "Systems of Inequalities," there is a section under the QR code that states: "How families can support at home: Talk about scenarios involving constraints, like budgeting for two items under a total cost. Ask your child how they would model that with inequalities." In Spanish, "Cómo pueden ayudar las familias en casa: Comenten situaciones que implican restricciones, como presupuestar dos artículos con un costo total. Pregunte a su hijo cómo modelaría eso con desigualdades."

## 2. Progress Monitoring

Materials support educators in effective implementation through frequent, strategic opportunities to monitor and respond to student progress.

### 2.1 Instructional Assessments

GUIDANCE	SCORE SUMMARY	RAW SCORE
2.1a	All criteria for guidance met.	2/2
2.1b	All criteria for guidance met.	2/2
2.1c	Materials do not allow educator-enabled content and language supports.	3/4
2.1d	All criteria for guidance met.	4/4
2.1e	All criteria for guidance met.	4/4
—	<b>TOTAL</b>	15/16

#### 2.1a – Materials include the definition and intended purpose for the types of instructional assessments.

The material includes the definition for types of instructional assessments. For example, a help article on what diagnostic assessments are available. The article includes steps to show teachers and administrators how to have the platform select questions from the Progress Learning question data bank. For Algebra II, the materials do not include intended purposes for types of instructional assessments.

The material includes the purpose for the types of instructional assessments. The purpose can be found in the "Algebra I, Geometry, and Algebra II Implementation Guide."

#### 2.1b – Materials include guidance to ensure consistent and accurate administration of instructional assessments.

Materials include guidance to ensure consistent and accurate administration of instructional assessments. Instructional assessments are supported by the "Implementation Guide," which gives an overview of what to expect to see on each lesson plan. It also outlines the time to administer each task, provides step-by-step guidance for administering each component (Explore, Elaborate, Evaluate) of the assessment, and includes information to support the teacher in understanding the assessments.

#### 2.1c – Digital assessments include printable versions and accommodations, including text-to-speech, content and language supports, and calculators, that educators can enable or disable to support individual students.

Materials include a management page that allows teachers to toggle text-to-speech on or off for all students. The default setting is on. Materials include the option to print assessments already created, as well as those teachers build themselves. The online platform has a help article on "What

accommodations are available in Progress Learning?" They can enable text-to-speech accommodations in two places. Teachers are also able to override the platform settings when creating individual assignments. Teachers can create an assessment for the majority of students, then duplicate and edit the settings and items to accommodate the learning needs of specific students. All videos include transcripts with an option to enable Spanish translation.

The materials include the ability for educators to enable or disable calculator support to individual students. For example, when assigning activities/assessments and for practice in the student "Study Plan," the teacher can select the student and then select what type of calculator the student can use.

### **2.1d – Materials include diagnostic assessments with TEKS-aligned tasks or questions, including interactive item types with varying complexity levels.**

Materials do include diagnostic assessments with TEKS-aligned tasks or questions, including interactive item types with varying complexity levels. There are multiple-choice questions, direct input, and drag and drops. In terms of complexity, they have strategic thinking, recall, and skills and concepts.

### **2.1e – Materials include a variety of formative assessments with TEKS-aligned tasks or questions, including interactive item types with varying complexity levels.**

The materials include customizable assessment tasks and questions designed with varying levels of complexity with identified DOK (Depth of Knowledge: 1, 2, 3) category for each online assessment question. Assessments include interactive item types, such as multiple choice, graphing, math text entry, drawing, multipart, drag-drop, and multi-select questions aligned with the TEKS. The printable assessment includes a learning snapshot that is very direct in the question with DOK; it contains levels 1 and 2 and contains questions where they have to justify their answer (DOK 3).



## 2.2 Data Analysis and Progress Monitoring

GUIDANCE	SCORE SUMMARY	RAW SCORE
2.2a	All criteria for guidance met.	3/3
2.2b	All criteria for guidance met.	1/1
2.2c	All criteria for guidance met.	2/2
2.2d	All criteria for guidance met.	2/2
2.2e	This guidance is not applicable to the program.	N/A
—	<b>TOTAL</b>	<b>8/8</b>

### **2.2a – Instructional assessments include scoring information and guidance for interpreting student performance, including rationale for each correct and incorrect response.**

Materials include instructional assessments with scoring information and guidance for interpreting student performance, including rationale for each correct and incorrect response. For example, in Lesson 15: "Domain and Range of Quadratic Functions," for questions that are open response, the rationale includes possible errors that students who incorrectly responded may have made.

Materials include several reports that provide scoring information for interpreting student performance; however, these reports do not include guidance for interpreting. The reports include, but are not limited to: Assessments Results, Assessment Comparison, Student Diagnostic Strengths and Weaknesses, and Results.

### **2.2b – Materials provide guidance for the use of included tasks and activities to respond to student trends in performance on assessments.**

Materials do not provide guidance for the use of included tasks and activities to respond to student trends in performance on assessments. Within the lesson, there is an "Evaluate" section that contains an answer rationale to both correct and incorrect multiple choice answers, but it does not tell teachers how to address the student trend. Within the lesson, there is an Explore section that contains an answer rationale, but it does not tell teachers how to address the student trend.

### **2.2c – Materials include tools for teachers to track student progress and growth, and tools for students to track their own progress and growth.**

Materials include tools for teachers to track student progress and growth. Teachers can utilize various reports to analyze individual student data, including the "Assessment Comparison Report," that shows growth over time by domain and/or standard. Materials include tools for students to track their own progress and growth. A "Goal Setting Sheet" is available for student use within the teacher instructional resources—other progress tracking templates are also provided. The digital platform identifies student

trends in the data, providing educators with information such as cumulative data based on all activities completed for assessments, practice tests, practice questions, videos, and diagnostics. They can see how students are progressing in a specific subject area in real-time with the color-coded dot rank system.

The cumulative data is broken down by standard, and the report can be filtered by class, date range, and by source. View class averages or student averages by navigating between the "Class Dot Rank" and the "Student Dot Rank" tabs. Click on a student's name to pull an individual student progress report. Admins can see school-wide progress reports by teacher and class.

**2.2d – If designed to be static, materials provide prompts and guidance to support educators in conducting frequent checks for understanding at key points throughout each lesson or activity.**

The "Implementation" section of the "Explore Teacher Guide" includes a step-by-step guide that directly correlates to the sequence and content of the slides presentation. It includes important cues and identifies key moments in the lesson for when to listen and check for student understanding. Think-Pair-Share appears in each lesson.

The materials include printed lesson plans that include prompts for teachers to pause and check for understanding at critical points in the lesson, such as after explaining a concept or before transitioning to a new activity. Think-Pair-Share appears in the majority of the lesson plans.

Materials include prompts to support educators in conducting frequent checks for understanding at key points throughout each lesson. Each lesson contains a "Teacher Guide" section, which includes questioning prompts to utilize throughout the lesson.

**2.2e – If designed to be adaptive, materials provide frequent checks for understanding at key points throughout each lesson or activity.**

This guidance is not applicable because the program is not designed to be adaptive.

### 3. Supports for All Learners

Materials support educators in reaching all learners through design focused on engagement, representation, and action/expression for learner variability.

#### 3.1 Differentiation and Scaffolds

GUIDANCE	SCORE SUMMARY	RAW SCORE
3.1a	All criteria for guidance met.	1/1
3.1b	The materials include explicit educator guidance for language supports, but do not include pre-teaching and embedded supports for developing academic vocabulary and unfamiliar references in the text.	2/4
3.1c	All criteria for guidance met.	2/2
3.1d	The materials do not include accommodations for content and language support.	2/3
3.1e	All criteria for guidance met.	2/2
—	TOTAL	9/12

##### **3.1a – Materials include explicit educator guidance for lessons or activities scaffolded for students who have not yet reached proficiency in prerequisite or grade-level concepts and skills.**

Materials include explicit educator guidance for lessons or activities scaffolded for students who have not yet reached proficiency in prerequisite or grade-level concepts and skills. For example, there is an article called "How Do I Assign Quick-Click Remediation?" The report walks the educator through the process of how to assign remediation. The article also states, "You can also assign Quick Click Remediation through your Progress Report. This will allow you to see a more global view of progress over time, rather than viewing progress for a single assignment."

##### **3.1b – Materials include explicit educator guidance for language supports, including pre-teaching and embedded supports for developing academic vocabulary and unfamiliar references in text.**

The materials include frequent structured opportunities for students to talk with partners and groups using academic language and vocabulary. (Pre Teach Support) A lesson plan student handout," which is used at the beginning of the lesson, includes notes, cooperative learning, and individual practice that provides opportunities for students to talk with partners using vocabulary identified within the lesson. (Embedded Support) In the teacher slideshow, there is a person at the bottom that uses a student-friendly explanation/definition of terms/concept.

For each lesson plan in "Algebra," there is a dedicated section for new grade-level vocabulary and previously taught vocabulary. The vocabulary lists include "academic and mathematical language directly

found in the content standards covered in each lesson plan, and vocabulary that was previously introduced to students in earlier grades that vertically align to the grade-level standards being taught."

Additionally, the list also includes vocabulary that may not be explicitly stated in the content standards but were used on items aligned to the lesson plan standards that have been assessed on the State of Texas Assessment of Academic Readiness (STAAR)."

### **3.1c – Materials include explicit educator guidance for enrichment and extension activities for students who have demonstrated proficiency in grade-level and above grade-level content and skills.**

The material provides additional activities for "advanced learners" in the form of an instructional video and a practice set. For example, in Lesson Plan 4: "Absolute Value Equations & Inequalities," there is a section labeled "Additional Activities for Intervention and Enrichment." In this section, there is a heading labeled "For advanced learners" in every lesson. This will take them to a video to watch, and then they will have a few questions for the students to answer based off of that video.

### **3.1d – Digital materials include accommodations, including text-to-speech, content and language supports, and calculators that educators can enable or disable to support individual students.**

Materials include the ability for teachers to allow calculator use on digital assessments. Teachers are able to select which calculator to allow (four-function, scientific, or graphing) for assessments already created, or those they build themselves. The digital assessment builder can allow educators to enable text-to-speech for individual students, also giving them the support to do English or Spanish. The online platform Study Plan allows a toggle between English and Spanish. Video and practice set questions are supported.

There is a help article that provides specific instructions and guidance on how to enable and utilize the various accessibility features for individual students. "Toggle on or off the text-to- Speech setting for individual students for the core subject that you teach."

The materials do not include accommodations for content and language supports.

### **3.1e – Materials include educator guidance on offering options and supports for students to demonstrate understanding of mathematical concepts in various ways, such as perform, express, and represent.**

Materials include educator guidance on offering options for students to demonstrate understanding of mathematical concepts in various ways, such as perform, express, and represent. The "Implementation Guide" includes cooperative learning strategy descriptions that are integrated throughout the lessons. This allows students to demonstrate their understanding in various ways.

Materials include educator guidance on offering support for students to demonstrate understanding of mathematical concepts in various ways, such as perform, express, and represent. Various graphic organizers are provided that support students showing their understanding in various ways. For example, there is a four-square graphic organizer, a Venn diagram graphic organizer, a part-part-whole graphic organizer, and more. The "Student Activities" section is found by scrolling down to the Instructional Resources section and selecting "Graphic Organizers." where there are 13 blank graphic organizers to choose from.

## 3.2 Instructional Methods

GUIDANCE	SCORE SUMMARY	RAW SCORE
3.2a	All criteria for guidance met.	5/5
3.2b	All criteria for guidance met.	2/2
3.2c	All criteria for guidance met.	3/3
3.2d	The materials do not include guidance to support educators.	1/2
3.2e	All criteria for guidance met.	2/2
—	<b>TOTAL</b>	13/14

### **3.2a – Materials include explicit (direct) prompts and guidance for educators to build knowledge by activating prior knowledge, anchoring big ideas, and highlighting and connecting key patterns, features, and relationships through multiple means of representation.**

Materials include explicit prompts and guidance for educators to build knowledge by activating prior knowledge. Each lesson includes this in the "Engage" portion of the lesson plan "Teacher Guide." For example, in Lesson 1: "Systems of 3 Equations," teachers are instructed to project a question from the Algebra I prerequisite TEKS. They are then given guiding prompts on what to look for in student work, and how to highlight multiple methods of student solutions leading to the correct response.

Each lesson includes a detailed "Teacher Guide" with suggestions for lesson implementation that includes guiding questions and common misconceptions.

The materials provide prompts and questions designed to help educators elicit what students already know about a topic before introducing new information. For example, in Lesson 5: "Quadratics, Square Roots, Complex Numbers," students activate prior knowledge on factoring, taking square roots, completing the square, and using quadratic formula which is found in "Teacher Slideshow."

Materials include explicit prompts and guidance for educators to build knowledge by highlighting and connecting key patterns, features, and relationships through multiple means of representations. For example, in Lesson 2: "Systems of Inequalities," the lesson plan includes a slideshow presentation that shows how to solve linear inequality systems by creating a table to represent possible solutions, and graphing the inequalities to visually represent the relationship between the two functions.

### **3.2b – If designed to be static, materials include educator guidance for effective lesson delivery and facilitation using various instructional approaches.**

Materials include educator guidance for effective lesson delivery and facilitation using various instructional approaches. Each lesson slideshow presentation incorporates specific cooperative learning strategies to support teachers in guiding students through mathematical discourse. For example, in

Lesson 3: "Parent Functions," on the "Teacher Guide" labeled "Implementations," it states: "Assign students to cooperative pairs (partners) for various activities throughout this lesson. For broader cooperation, assign students to two different cooperative pairs, such as a face partner and a shoulder partner, and vary which partner a student works with throughout the lesson."

For example, in the Lesson 3: "Parent Functions" slide deck, there are parts of the slides that have multiple cooperative learning strategies that are used during student practice, including: Rally Robin, Discuss and Do, and Round Robin. The second slide is a Rally Robin slide. The students are in partners, and they take turns graphing parent functions and discuss the things they notice about each function.

### **3.2c – Materials include multi-tiered intervention methods for various types of practice and structures and educator guidance to support effective implementation.**

Materials include multi-tiered intervention methods for various types of practice and structures. Each lesson includes opportunities for guided, independent, and collaborative learning. For example, in Lesson 4: "Absolute Value Equations & Inequalities," in the Explore portion of the lesson, teachers are guiding students through rate of change, and at times, students are instructed to work collaboratively with a partner. During the "Elaborate" and "Evaluate" portions, students are working independently.

The lesson plans include the slides which indicate where the teacher should provide the student handout so that the student can follow along. For example, in Lesson 7: "Function Inverses," under the Explore section, it states: "Pause the slideshow on slide 5. Give each student a copy of the second student handout: Student Handout 2: Analyze Function Inverses. Refer to its KEY 2 as needed. This handout corresponds to slides 6 through 9 of the slideshow."

### **3.2d – Materials include enrichment and extension methods that support various forms of engagement, and guidance to support educators in effective implementation.**

The materials offer enrichment and extension methods, such as videos tailored to different learners and tools for differentiated assignments that utilize standards and DOK levels; however, they do not include explicit implementation guidance, such as step-by-step strategies, sample lesson integrations, or recommendations for monitoring student progress.

For example, in Lesson 5: "Quadratics, Square Roots, Complex Numbers," the "Additional Activities for Intervention and Enrichment" section includes videos and follow-up questions, but does not provide teachers with actionable instructions, such as guidance on integrating these activities, pacing, or grouping strategies. The materials also do not offer direction on how teachers can use student responses to guide future support or challenge.

### **3.2e – Materials include prompts and guidance to support educators in providing timely feedback during lesson delivery.**

Materials include guidance to support educators in providing timely feedback during lesson delivery. Each lesson guide includes prompts and questions within each of the 5E model portions. This provides teachers with the opportunity to assess students' understanding and address any misconceptions before moving forward, or within a future portion of the lesson as appropriate. For example, in Lesson 4: "Absolute Value Equations & Inequalities," the presentation guide is broken into four sections with specific misconceptions to look for and questions to ask during each one.

Materials include prompts to support educators in providing timely feedback during lesson delivery. In the Assessment Bank, when assigning assessments or assignments digitally, teachers are given the option of if/when to allow students to view item details, and some assignments allow teachers to give multiple attempts for missed items.



### 3.3 Support for Emergent Bilingual Students

An emergent bilingual student is a student who is in the process of acquiring English and has another language as the primary language. The term emergent bilingual student replaced the term English learner in the Texas Education Code 29, Subchapter B after the September 1, 2021 update. Some instructional materials still use English language learner or English learner and these terms have been retained in direct quotations and titles.

GUIDANCE	SCORE SUMMARY	RAW SCORE
3.3a	All criteria for guidance met.	4/4
3.3b	This guidance is not applicable to the program.	N/A
3.3c	All criteria for guidance met.	1/1
3.3d	<p>The materials do not include embedded guidance for teachers to support emergent bilingual students in developing academic vocabulary through oral discourse.</p> <p>The materials do not include embedded guidance for teachers to support emergent bilingual students in making cross-linguistic connections through oral discourse.</p> <p>The materials do not include embedded guidance for teachers to support emergent bilingual students in developing academic vocabulary through written discourse.</p> <p>The materials do not include embedded guidance for teachers to support emergent bilingual students in making cross-linguistic connections through written discourse.</p>	6/8
3.3e	This guidance is not applicable to the program.	N/A
—	<b>TOTAL</b>	11/13

**3.3a – If designed to be static, materials include educator guidance on providing and incorporating linguistic accommodations for all levels of language proficiency [as defined by the English Language Proficiency Standards (ELPS)], which are designed to engage students in using increasingly more academic language.**

Materials do include educator guidance on providing and incorporating linguistic accommodations for all levels of language proficiency. For example, in the "Cooperative Learning Evidence Guide for ELLs" on page 4, under "Linguistic Accommodations for Language Proficiency Levels" it states:

Beginning—Have the student use simple sentence starters such as:

"The two things both . . ." or

"Thing A has . . ." or "Thing B has . . ." or

"The two things are different because . . ."

Intermediate—Have the student use sentence frames like

"One way the things are alike is . . ." or

"Thing A has . . . and thing B does not."

In addition to this, there are relevant cooperative learning strategies in each lesson plan so that teachers have quick access to guidance on implementing the cooperative learning strategies used in the lesson.

**3.3b – If designed to be adaptive, materials include embedded linguistic accommodations for all levels of language proficiency [as defined by the English Language Proficiency Standards (ELPS)], which are designed to engage students in using increasingly more academic language.**

This guidance is not applicable to the program because it is not designed to be adaptive.

**3.3c – Materials include implementation guidance to support educators in effectively using the materials in state-approved bilingual/ESL programs.**

Materials include implementation guidance to support educators in effectively using the materials in state-approved bilingual/ESL programs by incorporating cooperative learning structures. The materials include multiple structures through the Explore portion of each lesson that support students in engaging with the content.

Materials include implementation guidance to support educators in effectively using the materials in state-approved bilingual/ESL programs by including specific ELPS to incorporate in each lesson document.

**3.3d – Materials include embedded guidance to support emergent bilingual students in developing academic vocabulary, increasing comprehension, building background knowledge, and making cross-linguistic connections through oral and written discourse.**

Materials include embedded guidance to support emergent bilingual (EB) students in increasing comprehension through written and oral discourse. For example, in Lesson 1: "Systems of 3 Equations," during the Explore portion of the lesson, students begin practicing by writing equations and sharing with a partner (Think-Pair-Share). Later, they discuss with their partner how they should approach solving the problem and then solve it independently (discuss and do), and finish their practice with an independent digital assignment.

Materials include embedded guidance to support EB students in building background knowledge through written and oral discourse through the "Engage" portion of the lesson. This portion specifically focuses on

activating prior knowledge and often directs teachers to utilize the Think-Pair-Share cooperative learning structure with guidance to "Have students write . . ., then share and discuss . . . with a partner."

Materials do not include embedded guidance for teachers to support EB students in developing academic vocabulary or making cross-linguistic connections, through neither oral nor written discourse.

**3.3e – If designed for dual language immersion (DLI) programs, materials include resources that outline opportunities to address metalinguistic transfer from English to the partner language.**

This guidance is not applicable because the program is not designed for dual language immersion (DLI) programs.

## 4. Depth and Coherence of Key Concepts

Materials are designed to meet the rigor of the standards while connecting concepts within and across grade levels/courses.

### 4.1 Depth of Key Concepts

GUIDANCE	SCORE SUMMARY	RAW SCORE
4.1a	All criteria for guidance met.	2/2
4.1b	All criteria for guidance met.	4/4
—	TOTAL	6/6

#### **4.1a – Practice opportunities throughout learning pathways (including instructional assessments) require students to demonstrate depth of understanding aligned to the TEKS.**

Materials include practice assignments within the lesson plan that require students to demonstrate a depth of understanding aligned to the TEKS. For example, in Lesson 2: "Systems of Inequalities," students are tasked with taking a given situation and writing an equation and inequality, determining the maximum without being directly stated, and explaining why that is the maximum.

There are practice opportunities throughout learning pathways, including instructional assessments, requiring students to demonstrate depth of understanding aligned to the TEKS. For example, the slide shows the students the concept, asks them to demonstrate their knowledge, and then the student can click through the slides to reveal the answers.

#### **4.1b – Questions and tasks, including enrichment and extension materials, increase in rigor and complexity, leading to grade-level and above grade-level proficiency in the mathematics TEKS.**

Materials include questions and tasks that increase in rigor and complexity, leading to grade-level proficiency and above in the mathematics TEKS. For example, in Lesson 12: "Rational Equations and Functions," students begin by working with basic mathematical problems that lead into contextual word problems.

Materials include enrichment and extension materials that increase in rigor and complexity, leading to grade-level proficiency and above in the mathematics TEKS. For example, in Lesson 12: "Rational Equations and Functions," the teacher guide provides guided practice that walks students from basic to more complex understanding. The guide also provides an extension to Precalculus with sketching rational functions.

## 4.2 Coherence of Key Concepts

GUIDANCE	SCORE SUMMARY	RAW SCORE
4.2a	All criteria for guidance met.	1/1
4.2b	All criteria for guidance met.	1/1
4.2c	All criteria for guidance met.	4/4
—	<b>TOTAL</b>	6/6

### **4.2a – Materials demonstrate coherence across concepts horizontally within the grade level by connecting patterns, big ideas, and relationships.**

Materials demonstrate coherence across concepts horizontally within the grade level by connecting patterns, big ideas, and relationships. "Scope and Sequence PDF File" provides a rationale of the lesson. In Algebra II, Lesson 6: "Linear and NonLinear Systems," students build on their understanding of solving quadratic equations from Lesson 5 and systems of equations from Lesson 1 to solve systems that include one linear and one quadratic equation. They write and solve these systems algebraically and interpret the meaning of their solutions in context.

### **4.2b – Materials demonstrate coherence vertically across concepts and grade bands, including connections from grades 3–12, by connecting patterns, big ideas, and relationships.**

Materials demonstrate coherence vertically across concepts and grade bands, including connections from prior grades, by connecting patterns, big ideas, and relationships. The "Scope and Sequence" document lesson summaries include statements indicating vertical alignment, such as "students build on their Algebra I foundation" from Lesson 1.

Each lesson plan has a "Vertical Alignment" section. Understanding what students were previously taught in the "Looking Back" section helps frame the context for what they are about to learn, and they are directly associated with the activities in the "Engage" section for activating prior knowledge.

### **4.2c – Materials demonstrate coherence across lessons or activities by connecting students' prior knowledge of concepts and procedures to the mathematical concepts to be learned in the current grade level and future grade levels.**

Materials demonstrate coherence across lessons or activities by connecting students' prior knowledge of concepts and procedures to the mathematical concepts to be learned in the current grade level, but not in future grade levels. For example, in Lesson 12: "Rational Equations and Functions," the "Teacher Guide" identifies when students are using prior knowledge ("Verify that students recall vocabulary here: asymptotes, domain, interval notation."). Each lesson plan has an "Activate Prior Knowledge" section that identifies these concepts.

For example, the Algebra II, Lesson Plan: "Systems of Inequalities," states, "In the whole-class discussion, highlight prior knowledge of graphing linear equations, y-intercept, and slope. Stress that solutions to systems of inequalities are more than the point of intersection."

## 4.3 Coherence and Variety of Practice

GUIDANCE	SCORE SUMMARY	RAW SCORE
4.3a	All criteria for guidance met.	2/2
4.3b	All criteria for guidance met.	2/2
—	<b>TOTAL</b>	4/4

### 4.3a – Materials provide spaced retrieval opportunities with previously learned skills and concepts across learning pathways.

Materials provide spaced retrieval opportunities with previously learned skills across learning pathways. For example, in Lesson 8: "Equations of Parabolas," the "Engage" portion requires students to activate prior knowledge utilizing the skills of substituting  $x$  or  $y$  in the quadratic equation.

In Lesson Plan: "Linear Systems of Three Equations," students review substitution and elimination methods of solving a linear system—a skill learned in earlier lessons—then the lesson progresses to learn a new method of solving a linear system by introducing matrices and Gaussian elimination and using technology to solve a linear system.

### 4.3b – Materials provide interleaved practice opportunities with previously learned skills and concepts across learning pathways.

Materials provide interleaved practice opportunities with previously learned concepts across learning pathways. For example, in Lesson 1: "Systems of 3 Equations," students are shown how to solve the systems through substitution and matrices, and are then given the opportunity to solve the last question without noting a specific method.

In Lesson 8: "Equations of Parabolas," under the "Engage" section, there are questions that are based on older TEKS. For this lesson, the teacher displays a system of equations, and the students are asked to "Solve the system of equations." This is an Algebra 1 TEKS question.

## 5. Balance of Conceptual and Procedural Understanding

Materials are designed to balance conceptual understanding, procedural skills, and fluency.

### 5.1 Development of Conceptual Understanding

GUIDANCE	SCORE SUMMARY	RAW SCORE
5.1a	All criteria for guidance met.	3/3
5.1b	The materials do not provide opportunities for students to create concrete models of mathematical situations; questions and tasks provide opportunities for students to create representations of mathematical situations.	1/2
5.1c	All criteria for guidance met.	1/1
—	<b>TOTAL</b>	5/6

#### 5.1a – Questions and tasks provide opportunities for students to interpret, analyze, and evaluate mathematical concepts and complex, real-world situations.

Materials include questions and tasks that provide opportunities for students to interpret, analyze, and evaluate mathematical concepts and complex, real-world situations. For example, Lesson 5: "Quadratics, Square Roots, Complex Numbers," Discuss and Do question 3 instructs students to first discuss how they are going to solve the problem. This requires them to interpret, analyze, and evaluate all in one problem.

Materials include questions and tasks that provide opportunities for students to interpret, analyze, and evaluate mathematical concepts and complex, real-world situations. For example, a question from the assessment bank presents a problem where students have to interpret the value of the answer within the context of the problem. This also requires students to analyze and evaluate the problem in order to provide a complete response.

In Lesson 1: "Linear Systems of Three Equations," on the "Learning Snapshot" student handout, numbers 8–9, students are asked, "Which system of equations can be used to find the cost of each item sold at the bake sale?" for question 8 and then, "What is the cost of each item sold at the bake sale?" for question 9. This means that the students interpret, analyze, and evaluate a real world situation that uses linear systems of three equations.

#### 5.1b – Questions and tasks provide opportunities for students to create concrete models and representations of mathematical situations.

Materials include questions and tasks that provide opportunities for students to create representations of mathematical situations. For example, in Lesson 7: "Function Inverses," a task requires students to create a graphical representation for the inverse of the given function. Students then use the graph to answer additional questions. Another example is in Lesson 1: "Linear Systems of Three Equations," in the



second student handout where students are asked, "Write a system of equations for the following problem, then use Gaussian elimination to solve the system. Show your work and check your solution."

The materials do not provide opportunities for students to create concrete models of mathematical situations.

### **5.1c – Questions and tasks provide opportunities for students to apply conceptual understanding to new problem situations and contexts.**

Materials include questions and tasks that provide opportunities for students to apply conceptual understanding to new problem situations and contexts. For example, in Lesson 10: "Inverse Variation," students are asked to apply their knowledge of linear functions and direct variation to a new scenario involving inverse variation, but are given no explicit steps to arrive at a conclusion.

Another example is in Lesson 2: "Systems of Inequalities," where students are asked to determine the best outcome for a pizza order when given specific guidelines to stay within. Students must apply their knowledge of solving inequalities to find a solution, and then use reasonableness within the context of the problem to provide an answer.

## 5.2 Development of Fluency

GUIDANCE	SCORE SUMMARY	RAW SCORE
5.2a	All criteria for guidance met.	2/2
5.2b	All criteria for guidance met.	3/3
5.2c	All criteria for guidance met.	3/3
5.2d	All criteria for guidance met.	1/1
—	TOTAL	9/9

### 5.2a – Materials provide tasks that are designed to build student automaticity and fluency necessary to complete grade-level mathematical tasks.

Materials provide tasks that are designed to build student fluency necessary to complete grade-level mathematical tasks. The "Implementation Guide" includes a Discuss and Do cooperative learning strategy that teachers are encouraged to utilize at various times throughout each lesson. This strategy requires students to "Talk about the situation with your partner. Work out the problem on your own. Compare answers with your partner."

Materials provide tasks that are designed to build student automaticity necessary to complete grade-level mathematical tasks. Lessons include student practice applying the same skills within the context they were learned. For example, in Lesson 6: "Linear and Nonlinear Systems," students are given tasks to write and solve systems of equations. Enough practice is provided to help students reach automaticity.

Materials provide tasks that are designed to build student fluency necessary to complete grade-level mathematical tasks.

The "Elaborate" section of the lesson plans provides additional practice opportunities for students to build fluency. Students have the option to complete their study plan or complete teacher selected problems in the platform. For example, in Lesson 1: "Systems of 3 Equations," the teacher can create an assignment based on the topics identified 2A3A, 2A3B and name it "Systems of 3 Equations." Then the teacher can log in as a student, attempt the assignment and after the assignment is submitted, the platform suggests items for practice based on the results with videos and a practice set that builds students' automaticity and fluency.

### 5.2b – Materials provide opportunities for students to practice the application of efficient, flexible, and accurate mathematical procedures throughout learning pathways.

Materials contain guidance to support students in selecting increasingly efficient approaches to solve mathematical problems. For example, in Lesson 4: "Absolute Value Equations & Inequalities," the Discuss and Do cooperative learning strategy is used to provide students with an opportunity to discuss and determine efficient solutions to solving an absolute value real-world problem. The teacher notes provide additional guided questions for this portion of the lesson that support efficiency, flexibility, and accuracy.

The 5E structure of the lesson plans provides opportunities for students to practice efficient, flexible, and accurate mathematical procedures. Students are guided to activate prior knowledge, explore concepts through cooperative learning strategies, formalize understanding with video and practice questions, practice content they have learned on the platform, and demonstrate understanding through a formative assessment. For example, in Lesson 1: "Linear Systems of Three Equations," students activate prior knowledge of writing and solving a system of two linear equations, work with partners to complete the student handout, and then proceed to watch a video on solving by Gaussian elimination and solving with substitution. Then they have the option to practice further through the study plan in the online platform and complete assessments.

Materials provide opportunities for students to practice the application of efficient, flexible, and accurate mathematical procedures throughout learning pathways. The "Implementation Guide" includes a Discuss and Do cooperative learning strategy that teachers are encouraged to utilize at various times throughout each lesson. This strategy requires students to "Talk about the situation with your partner. Work out the problem on your own. Compare answers with your partner."

### **5.2c – Materials provide opportunities for students to evaluate mathematical representations, models, strategies, and solutions for efficiency, flexibility, and accuracy throughout learning pathways.**

Materials provide opportunities for students to evaluate mathematical strategies and solutions for efficiency, flexibility, and accuracy throughout learning pathways. For example, in Lesson 1: "Linear Systems of Three Equations," students review substitution and elimination methods of solving a linear system—a skill learned in earlier lessons—then the lesson progresses to learning a new method of solving a linear system by introducing matrices and Gaussian elimination and using technology to solve a linear system. Students were given an opportunity to solve a linear system algebraically using a method they prefer.

The "Engage" section states, "Have students work in collaborative pairs to solve the system of two linear equations algebraically. Remind the students to check their solutions by substituting the values into both equations. [2A.1(B)] Have students share how they solved the system, preferably by placing student work under a document viewer. If some students used the Substitution Method and other students used the Elimination Method, share an example of each one."

### **5.2d – Materials contain guidance to support students in selecting the most efficient approaches when solving mathematics problems.**

Materials contain guidance to support students in selecting increasingly efficient approaches to solve mathematical problems. For example, in Lesson 4: "Absolute Value Equations & Inequalities," the Discuss and Do cooperative learning strategy is used to provide students with an opportunity to discuss and

determine efficient solutions to solving an absolute value real-world problem. The teacher notes provide additional guided questions for this portion of the lesson.

Materials contain guidance to support students in selecting increasingly efficient approaches to solve mathematical problems. The "Implementation Guide" includes a Discuss and Do cooperative learning strategy that teachers are encouraged to utilize at various times throughout each lesson. This strategy requires students to "Talk about the situation with your partner. Work out the problem on your own. Compare answers with your partner."

### 5.3 Balance of Conceptual Understanding and Procedural Fluency

GUIDANCE	SCORE SUMMARY	RAW SCORE
5.3a	All criteria for guidance met.	2/2
5.3b	The materials do not include questions and tasks that provide opportunities for students to use concrete models, as required by the TEKS.	2/3
5.3c	The materials do not include supports for students in connecting concrete models to abstract (symbolic/numeric/algorithmic) concepts, as required by the TEKS. Materials do not include supports for students in creating concrete models to abstract (symbolic/numeric/algorithmic) concepts, as required by the TEKS. The materials do not include supports for students in defining and explaining concrete models to abstract (symbolic/numeric/algorithmic) concepts, as required by the TEKS.	3/6
—	<b>TOTAL</b>	7/11

#### 5.3a – Materials explicitly state how the conceptual and procedural emphasis of the TEKS are addressed.

Materials explicitly state how the conceptual and procedural emphasis of the TEKS are addressed through the "Teacher Guide" section of the lesson outline. For example, in Lesson 7: "Function Inverses," bullet 3 of the Explore section begins the implementation guidance for conceptual learning and states, "Have students work with partners to explore the concept of a function inverse using multiple representations," and "Have students discuss connections between the three representations." Both statements support conceptual learning.

The materials support procedural learning through the statement, "Graph the inverse function by switching the x and y coordinates of the points on the graph" (and other similar statements) in the student handout.

Materials explicitly state how the conceptual and procedural emphasis of the TEKS are addressed through the "Teacher Guide" section of the lesson outline. For example, in Lesson 2: "Systems of Inequalities," bullet 3a of the "Explore" section begins the implementation guidance for conceptual learning and states that it "allows students to Guess & Check for solutions," and to "[d]iscuss that multiple answers give \$114, but none give \$115." Both statements support conceptual learning. The materials support procedural learning through the statement, "Solve the system by graphing on paper," which is found in bullet 5 of the same section.

### **5.3b – Questions and tasks provide opportunities for students to use concrete models, pictorial representations, and abstract models as required by the TEKS.**

Materials include questions and tasks that provide opportunities for students to use pictorial representations and abstract models during multiple portions of the 5E lesson cycle. For example, in Lesson 2: "Systems of Inequalities," the slideshow prompts students to graph the inequalities in order to find the solution and use the graph to determine if a solution is reasonable (pictorial). The "Learning Snapshot" prompts students to determine which of the given statements cannot be true in the context of the problem situation in question two (abstract).

In a different example, in Lesson 7: "Function Inverses," question two of the student handout prompts students to analyze the given graphs and determine which one represents inverse functions (pictorial). Question three presents the functions as an equation and asks students to determine the inverse of each (abstract).

Materials do not include questions and tasks that provide opportunities for students to use concrete models as required by the TEKS.

### **5.3c – Materials include supports for students in connecting, creating, defining, and explaining concrete and representational models to abstract (symbolic/numeric/algorithmic) concepts, as required by the TEKS.**

Materials include support for students in connecting and creating representational models to abstract (symbolic/numeric/algorithmic) concepts through guided questioning. For example, in Lesson 2: "Systems of Inequalities," students are prompted to create a graph of a system of linear inequalities from a given scenario (creating), and then connect the representation to reasonable solutions (connecting).

In a different example, in Lesson 7: "Function Inverses," teachers are provided with several questions to present to students including: "Have students discuss connections between the three representations" (defining/explaining) and "What features of the original graph helped you find the features of the inverse?" (connecting). Through these questions, students are able to connect and either define and/or explain the model to an abstract concept.

Materials do not include support for students in connecting concrete models to abstract (symbolic/numeric/algorithmic) concepts, as required by the TEKS. Materials do not include support for students in creating concrete models to abstract (symbolic/numeric/algorithmic) concepts, as required by the TEKS.

Materials do not include support for students in defining and explaining concrete models to abstract (symbolic/numeric/algorithmic) concepts, as required by the TEKS.

## 5.4 Development of Academic Mathematical Language

GUIDANCE	SCORE SUMMARY	RAW SCORE
5.4a	All criteria for guidance met.	1/1
5.4b	All criteria for guidance met.	2/2
5.4c	All criteria for guidance met.	1/1
5.4d	All criteria for guidance met.	2/2
5.4e	All criteria for guidance met.	2/2
—	<b>TOTAL</b>	<b>8/8</b>

### 5.4a – Materials provide opportunities for students to develop academic mathematical language using visuals, manipulatives, or other language development strategies.

Materials provide opportunities for students to develop their academic mathematical language using visuals, manipulatives, or other language development strategies. For example, in Lesson 3: "Parent Functions," students are instructed to, "Identify the parent functions shown in each graph. Give the name and the equation." Specific vocabulary terms are given and include the graph of a function with examples.

Another example, in Lesson 7: "Function Inverses," students are introduced to inverse functions through a graph and table. They are then given different graphs and asked to determine which graphs represent inverse relationships and, "explain your reasoning," and, "How did you determine if they were inverses?" Students are showing their understanding of the vocabulary through these activities.

### 5.4b – Materials include embedded educator guidance to scaffold, support, and extend students' use of academic mathematical vocabulary in context when communicating with peers and educators.

Materials do include embedded educator guidance to scaffold and support students' use of academic mathematical vocabulary in context when communicating with peers and educators. For example, in Lesson 8: "Equations of Parabolas," in the "Explain," it states:

"Have students complete the following sentence stems to support the development of academic vocabulary:

'I can rewrite the equation of a parabola from standard form to vertex form by . . .'

'A parabola is the set of all points that are . . . from . . .'

'I can use key features to write the equation of a parabola by . . .'"

The materials include embedded educator guidance to scaffold, support, and extend students' use of academic mathematical vocabulary. The product includes sentence stems and vocabulary lists that support educators build academic vocabulary when communicating with peers and educators.

#### **5.4c – Materials include embedded guidance to support student application of appropriate mathematical language and academic vocabulary in discourse.**

Materials do include embedded guidance to support student application of appropriate mathematical language and academic vocabulary in discourse. This includes teacher guides within the "Teacher Slideshow" with targeted questions that prompt students to explain concepts like inequalities using precise language, as well as scripted Think-Pair-Share activities and Bell Ringers designed to activate prior knowledge and encourage vocabulary use. Sentence stems and slideshow prompts help scaffold student communication by modeling academic language and fostering structured discussions. Teacher guidance within the lesson plan "Explain" section also includes real-time questioning strategies during tasks, encouraging students to articulate reasoning clearly and use correct terminology in context.

For example, in Lesson 2: "Systems of Inequalities," in the "Engage" section, there is a note that states: "In the whole-class discussion, highlight prior knowledge of graphing linear equations, y-intercept, and slope. Stress that solutions to systems of inequalities are more than the point of intersection, and shading is above/below the line (except for a vertical line). Students should check a verification point like (0, 0)."

Another example, in Lesson 1: "Linear Systems of Three Variables," under the "Teacher Guide" in the "Implementation" section, it states:

"Questions to ask students:

How did we solve systems of two equations before?

What does substitute/substitution mean?

What does eliminate/elimination mean?

What does technology mean?"

#### **5.4d – Materials include embedded guidance to facilitate mathematical conversations allowing students to hear, refine, and use math language with peers.**

Materials do include embedded guidance to facilitate mathematical conversations, allowing students to hear math language with peers. The lesson plans include a section for "Questions to Ask Students" in Discuss and Do portions. These questions provide educator guidance to facilitate mathematical conversations, allowing students to hear. For example, in Lesson 10: "Inverse Variation," referring to the slide deck, the directions state: "Have partners discuss the approach to the problem and find the answer."



Questions to ask:

How do we know this is an inverse variation?

Should the cake take more or less time to bake?"

An additional example, in Lesson 5: "Quadratics, Square Roots & Complex Numbers," from the slide deck titled "Discuss and Do - Let's Use Technology," the directions state: "Give the students the opportunity to brainstorm with their partners about how to obtain the equation using the features of the graphing calculator." The slide provides step-by-step guidance for the students. It gives students an opportunity to use a graphing calculator and go through the steps to obtain the quadratic equation using the quadratic regression option.

**5.4e – Materials include embedded guidance to anticipate a variety of student answers including exemplar responses to questions and tasks, including guidance to support and/or redirect inaccurate student responses.**

Materials include embedded guidance to anticipate a variety of student answers, including exemplar responses to questions and tasks and guidance to support inaccurate student responses. When working in their study plan, students are given text explanations to wrong answers: "When students miss items in their Study Plan, a text explanation will provide the student with immediate feedback that will help walk them through the problem-solving process."

Materials include embedded guidance to anticipate a variety of student answers, including exemplar responses to questions and tasks and guidance to support inaccurate student responses. Common misconceptions are provided in the "Teacher Guide" section of each lesson and are sometimes included within the specific "Implementation" of the lesson.

For example, in Lesson 12: "Rational Equations & Functions," the following guidance is given: "Remind them to be careful of any subtraction signs, especially where the numerator requires distributing." (4.b)

The materials include embedded guidance to anticipate a variety of student answers, including exemplar responses to questions and tasks. For example, student handouts included in each lesson plan include answer keys that detail anticipated responses and exemplar responses, allowing educators to gauge student understanding against clear benchmarks.

The materials include embedded guidance to support inaccurate student responses. The "Teacher Guide" embedded within each lesson plan explicitly identifies common misconceptions or potential inaccurate thinking that may occur. The direct anticipation of student responses serves as a form of guidance for educators to inform their support and redirection strategies during lesson delivery.

## 5.5 Process Standards Connection

GUIDANCE	SCORE SUMMARY	RAW SCORE
5.5a	All criteria for guidance met.	1/1
5.5b	All criteria for guidance met.	2/2
5.5c	All criteria for guidance met.	1/1
—	<b>TOTAL</b>	4/4

### 5.5a – TEKS process standards are integrated appropriately into the materials.

Materials have TEKS process standards integrated appropriately into the materials. The "Scope and Sequence" document includes a chart identifying which process TEKS are integrated into each lesson. The chart indicates that all process TEKS will be incorporated over the entirety of the lessons, but not all process TEKS are in each lesson.

The teacher slideshow for the lesson includes activities aligned to one or more of the process standards. For example, in Lesson 13: "Radical Expressions and Equations," students analyze a given problem and are tasked with finding the "worst, trickiest, and best" answers, along with justifying their choices and providing support. This requires students to analyze mathematical relationships, communicate mathematical ideas, and display, explain, and justify mathematical ideas and arguments.

### 5.5b – Materials include a description of how process standards are incorporated and connected throughout the learning pathways.

Materials include a description of how process standards are incorporated and connected throughout the learning pathways. The "Scope and Sequence" document includes a chart identifying which process TEKS are integrated into each lesson. The chart indicates that all process TEKS will be incorporated over the entirety of the lessons, but not all process TEKS are in each lesson.

The "Implementation Guide" describes the intent of utilizing the cooperative learning structures to support engagement with both the content and process standards.

### 5.5c – Materials include an overview of the TEKS process standards incorporated into each lesson.

Materials include an overview of the TEKS process standards incorporated into each lesson. The lesson documents are formatted so that integrated process standards are listed within the beginning pages of each lesson. For example, in Lesson 9: Factoring Polynomials," in the section labeled "Standards," it states the following TEKS:

Algebra II Content:

2A.7(D) Determine the linear factors of a polynomial function of degree three and of degree four using algebraic methods. (S)

2A.7(E) Determine linear and quadratic factors of a polynomial expression of degree three and of degree four, including factoring the sum and difference of two cubes and factoring by grouping. (R)

The "Scope and Sequence" document includes a chart identifying which process TEKS are integrated into each lesson. The chart indicates that all process TEKS will be incorporated over the entirety of the lessons, but not all process TEKS are in each lesson.

## 6. Productive Struggle

Materials support students in applying disciplinary practices to productive problem-solving, including explaining and revising their thinking.

### 6.1 Student Self-Efficacy

GUIDANCE	SCORE SUMMARY	RAW SCORE
6.1a	All criteria for guidance met.	3/3
6.1b	All criteria for guidance met.	3/3
6.1c	All criteria for guidance met.	3/3
—	<b>TOTAL</b>	9/9

#### 6.1a – Materials provide opportunities for students to think mathematically, persevere through solving problems, and to make sense of mathematics.

Materials provide opportunities for students to think mathematically, persevere through solving problems, and to make sense of mathematics. For example, in Lesson 8: "Equations of Parabolas," students are instructed to use the Discuss and Do cooperative learning structure, which requires them to talk about the situation, work it out on their own, and compare with each other (think mathematically, make sense of mathematics).

In another example, in Lesson 13: "Radical Expressions & Equations," students are instructed to use the Rally Coach and Player cooperative learning structure, which requires them to support each other through the process of solving the process (persevere through solving problems).

#### 6.1b – Materials support students in understanding, explaining, and justifying that there can be multiple ways to solve problems and complete tasks.

Materials support students in understanding, explaining, and justifying that there can be multiple ways to solve problems and complete tasks. For example, in Lesson 1: "Systems of 3 Equations," students are shown how to solve the systems through substitution and matrices and are then given the opportunity to solve the last question without noting a specific method.

In the slide deck for the same lesson, a slide named "Putting it Altogether" Discuss and Do, students are given a problem about cookie dough. The students are given information and then are asked to find out how much each cookie type costs. Students are not told how to solve the problem; they are just asked the question. After the students have worked on the problem, then the slideshow continues, showing how they can put the information into a system of equations and how the students can put the same information into a matrix.

**6.1c – Materials are designed to require students to make sense of mathematics through multiple opportunities for students to do, write about, and discuss math with peers and/or educators.**

Materials are designed to require students to make sense of mathematics through multiple opportunities for students to do, write about, and discuss math with peers and/or educators. For example, in Lesson 7: "Function Inverses," students complete cooperative learning structures that require them to solve a problem and explain their reasoning. The materials also provide an opportunity for students to write about their solutions by asking students to explain how they determined the solution by asking an open-ended question, "How did you determine if they were inverses?"

Materials are designed to require students to make sense of mathematics through multiple opportunities for students to do, write about, and discuss math with peers and/or educators. For example, in Lesson 14: "Exponentials and Logarithms," students are required to "discuss with your partner," solve a problem, and then write about their answers. "Explain the validity of this solution."

## 6.2 Facilitating Productive Struggle

GUIDANCE	SCORE SUMMARY	RAW SCORE
6.2a	All criteria for guidance met.	8/8
6.2b	All criteria for guidance met.	4/4
—	TOTAL	12/12

### **6.2a – Materials support educators in guiding students to share and reflect on their problem-solving approaches, including explanations, arguments, justifications, and multiple points of entry.**

Materials support educators in guiding students to share their problem-solving approaches, including explanations, arguments, justifications, and multiple points of entry. For example, in Lesson 6: "Linear and Nonlinear Systems," teachers are provided with guidance that is embedded within the different portions of the 5E lesson model. This supports guiding students to share the problem-solving approaches. A few examples include: "Pause for their explanations of why they picked what they did" (explanations); "Why did you pick the answer you did for this round?" (justifications); and "Where is the easiest place to substitute?" (arguments).

Materials support educators in guiding students to share their problem-solving approaches, including explanations, arguments, justifications, and multiple points of entry. The "Implementation Guide" includes 13 cooperative learning structures that together support educators in guiding students to share their problem-solving approaches. Some examples include: Discuss and Do (explanations), Finger Votes (arguments and justifications), and Rally Coach and Player (multiple points of entry). Materials do support educators in guiding students to reflect on their problem-solving approaches, including explanations, arguments, justifications, and multiple points of entry. In the lesson plans, there is a document titled "Learning Snapshot Reflection"; there are questions that have students reflecting on various approaches, explanations, arguments, and justifications. For example, question 3 states, "Choose one problem you solved correctly. Explain your problem-solving approach. How could you demonstrate that your solution is valid to someone who approached the problem in a different way?"

### **6.2b – Materials include prompts and guidance to support educators in providing explanatory feedback based on student responses and anticipated misconceptions.**

Each lesson plan has a section for "common misconceptions," "guiding questions," "prompts," and "guidance" in providing explanatory feedback for anticipated student responses. For example, in Lesson 3: "Parent Functions," under the "Teacher Guide" section of the lesson plan, there are two sections, "Common Misconceptions" and "Guiding Questions." For this lesson, they state:

Common Misconceptions:

Students will struggle with sketching parent functions until they realize there are a couple of key points and features that determine each parent function.

Students may enter equations into graphing calculators incorrectly.

Students are likely to mix up exponential and logarithmic functions.

Guiding Questions:

What does the graph of each parent function look like?

What are the key features of each parent function?

How do we determine the domain and range of each?

The materials provide explanatory feedback through multiple features, including immediate video responses on the digital platform when students answer incorrectly and reattempt opportunities to reinforce learning. The lesson plans and "Teacher Guides" include prompts and rationales, such as in the SuperSheets answer key rationales, that help educators identify likely misconceptions and tailor their feedback accordingly.

Educators are supported with embedded guidance on addressing common misunderstandings like confusing place values or misapplying keywords in word problems. Slideshows include suggestions for addressing student thinking, such as validating different visual representations or recommending manipulatives to clarify abstract concepts—this helps teachers provide meaningful, corrective feedback aligned to student needs.